

SM3H 3.3 odd answers

1. yes
3. no
5. $(-8, -2) \cup (0, 2) \cup (5, \infty)$
7. yes, 10
9. -2, 2; Values: 6, 10
- 11a. x-int: $(-2, 0), (2, 0)$; y-int: $(0, 3)$
- 11b. Domain: $[-4, 4]$, Range: $[0, 3]$
- 11c. increasing: $(-2, 0) \cup (2, 4)$
Decreasing: $(-4, -2) \cup (0, 2)$
Constant: N/A
- 11d. even
- 13a. x-int: $(-\frac{1}{3}, 0), (2\frac{1}{2}, 0)$; y-int: $(0, \frac{1}{2})$
- 13b. Domain: $[-3, 3]$; Range: $[-1, 2]$
- 13c. Increasing: $(2, 3)$
Decreasing: $(-1, 1)$
Constant: $(-3, -1) \cup (1, 2)$
- 13d. neither
- 15a. max at $x = 0$, value = 3
- 15b. min at $x = -2$, 2; value = 0
17. oops no 17!
19. even
21. odd
23. even
25. ab. Max: $(3, 4)$, ab. Min: $(1, 1)$
- 27a. -4
- 27b. -8
- 27c. -10
- 29a. 0
- 29b. 5
- 29c. -2
31. $\frac{x^2+x+6}{(x+4)(x-2)}$
33. $x \geq -14$; $x = 5 \pm \sqrt{37}$